Louisiana Department of Environmental Quality (LDEQ) Office of Environmental Services

STATEMENT OF BASIS

National Oilwell Varco LP
National Oilwell Varco LP - Amelia North Coating Plant
Amelia, Assumption Parish, Louisiana
Agency Interest Number: 4832
Activity Number: PER20050002
Proposed Permit Number: 0200-00027-V1

I. APPLICANT

Company:

National Oilwell Varco LP PO Drawer 1349 Amelia, Louisiana 70340

Facility:

National Oilwell Varco LP - Amelia North Coating Plant 1844 Hwy 662 Amelia, Assumption Parish, Louisiana

Latitude: 29° 41' 21" Longitude:

II. FACILITY AND CURRENT PERMIT STATUS

National Oilwell Varco, L.P., National Oilwell Varco, L.P. - Amelia North Coating Plant, an existing coating facility located two miles north on state Route 662 from the junction of U.S. Route 90 and state Route 662 east of Amelia and west of Boeuf in Assumption Parish. Construction at the facility began on January 01, 1981 under Permit No. 1487-T issued on December 23, 1980 to the original owner AMF Tuboscope, Inc. A request to add the external coating process was approved under Permit No. 1562-T issued June, 15, 1981.

91° 5'

37"

The facility obtained its initial Part 70 Operating Permit No. 0200-00027-V0 on March 15, 2001, under the name of Tuboscope Vetco International, LP.

A number of name changes and modifications between December 15, 2003 and March 06, 2007 were approved.

The facility currently operates under its Part 70 operating Permit No. 0200000027-V0 and also under two active small source permits: Permit No. 0200-00026-00, issued June 23, 1995 and Permit No. 0200-00037-00 granted June 20, 2000. These two permits are still active and were not incorporated into the initial Part 70 permit.

The facility also is part of a contiguous stationary source which includes in addition to the two small source permits mentioned above, and Amelia South Coating Plant permitted separately under Permit No. 0200-00019-V1 issued December 29, 2006.

National Oilwell Varco LP - Amelia North Coating Plant is a designated Part 70 source. Several Part 70 permits have been issued to the operating units within the complex. These include:

Permit No.	Unit or Source	Date Issued	
0200-00019-V1	Amelia Pipe Coating Plant South	December 29, 2006	

The facility submitted timely applications for initial Part 70 permits for other units in the complex, which continues to operate under the state permits listed below:

Permit No.	Unit or Source	Date Issued
0200-00019-V0	Amelia Pipe Coating Plant South*	February 11, 2005

^{*.} The facility was acquired by Varco in September 2002 from ICO Worldwide, Inc. Prior to Varco's acquisition, the facility was permitted as a minor source of air pollutants. Varco applied for and obtained the facility's initial Part 70 permit referenced above.

PROPOSED PROJECT/PERMIT INFORMATION

Application

A permit application and Emission Inventory Questionnaire were submitted by National Oilwell Varco, L.P. (NO Varco) on September 14, 2005 requesting a renewal and modification of its Part 70 operating permit. Additional information dated October 27, 2005, April 18, 2006, January 23, 2009, February 27, 2009, March 06, 2009, March 24, 2009, and March 30, 2009 was also received. The application was subsequently updated on April 02, April 15, May 01, May 14, and May 28, 2009.

Project

Varco proposes the following actions and changes at its Amelia North Coating Plant:

1. Renewal of the facility's Part 70 permit,

- 2. Removal of the external coatings containing large amounts of xylenes and toluene,
- 3. Addition of several new coating materials which will result in the emission of small amounts of several toxic air pollutants (TAPs) not previously emitted at this facility,
- 4. Incorporation of all permit actions granted since the issuance of the initial Part 70 permit on March 15, 2001,
- 5. Incorporate the emission points from two active small source permits separately permitted (Permit No. 0200-00026-00, issued June 23, 1995 and Permit No. 0200-00037-00 granted June 20, 2000), and
- 6. Update the emissions using the most recent available approved methods.

Proposed Permit

Permit 0200-00027-V1 will be the renewal/modification of Part 70 operating permit 0200-00027-V0 for the National Oilwell, Varco, L.P. – Amelia North Coating Plant.

Permitted Air Emissions

Estimated emissions in tons per year are as follows:

Pollutant	Before	After	Change
PM ₁₀	40.33	38.96	- 1.37
SO ₂	1.32	1.31	- 0.01
NO_X	38.80	38.73	- 0.07
СО	7.57	42.25	+ 34.68
VOC	118.57	124.75	+ 6.18
TAPs	7.170	15.000¹	+ 7.830

¹Toxic air pollutants (TAPs) Cap that includes a maximum of 8.000 tons/yr of total hazardous air pollutants (HAPs).

Contiguous Facilities Summary:

Varco Amelia North Coating Plant is one of two contiguous facilities individually permitted. The other facility is: Varco, L.P. – Amelia Coating Plant South (AI No. 17632) which currently operates under Permit No. 0200-00019-V1, issued December 29, 2006.

The permitted and estimated emissions from each facility, as well as the combined total emissions from both facilities, in tons per year, are presented in the table below:

National Oilwell Varco, L.P. Complex		Emissions - TPY					
		SO ₂	NOX	CO	VOC	HAPs	TAPs
National Oilwell Varco, L.P. – North Amelia Coating Plant AI No. 4832; Permit No. 0200-00027-V1*	38.96	1.31	38.73	42.25	124.75	8.001	15.00 ²
National Oilwell Varco, L.P. – Amelia Coating Plant South Al No. 17632; Permit No. 0200-00019-V1		0.36	18.55	11.67	87.32	16.73 ³	58.98
Total / Combined Emissions	72,22	1.67	57.28	53.92	212.07	24.73 ⁵	73.98

^{*}Reflects the emissions of the renewal/modification submittal dated April 15, 2009.

IV REGULATORY ANALYSIS

The applicability of the appropriate regulations is straightforward and provided in the Specific Requirements section of the proposed permit. Similarly, the Monitoring, Reporting and Recordkeeping necessary to demonstrate compliance with the applicable terms, conditions and standards are also provided in the Specific Requirements section of the proposed permit.

Applicability and Exemptions of Selected Subject Items

ID No:	Requirement	Notes
	40 CFR 63 – Subpart HHHHHHH – National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources.	Comply with the NESHAP's applicable requirements by January 10, 2011 and with the notifications, recordkeeping, and reporting requirements by January 10, 2010.
	LAC 33:III.919 and 927 – Emission Inventory (EI)	Submit EI by March 31 for the period January 1 to December 31 of previous year. Submit discharge reports as required.
UNF 001 Facility Wide	LAC 33.III.509 – Prevention of Significant Deterioration	DOES NOT APPLY. The facility is not a PSD major stationary source. [LAC 33.III.509.A]
	40 CFR 63 - Subpart MMMM— National Emission Standards for Hazardous Air pollutants: Surface Coating of Miscellaneous Metal and Products.	DOES NOT APPLY. The facility is neither a major source of HAP nor a part of a major source of HAP emission. [40 CFR 63 III. Summary of the Final Rule]
	Chemical Accident Prevention Provisions [40 CFR 68]	DOES NOT APPLY. Facility has less than threshold amounts of regulated substances.

^{1,3}HSites' respective hazardous air pollutants (HAPs) Caps.

^{2,4}Sites' respective toxic air pollutants (TAPs) Caps.

⁵Combined total emissions for any individual HAP is < 10 tons per 12 consecutive month period.

ID No:	Requirement	Notes
ARE 001 – ARE 003; C1-C3 -Liquid Coating Station #1 - 3	40 CFR 64 – Compliance Assurance Monitoring	DOES NOT APPLY. Facility took a federally enforceable condition to insure that pre-control emissions from each coating station is less than 100 tons/yr.
ARE 007 – ARE 009 – X1 – X3 – Exterior Coating #1, Internal Coating, and External Coating #2	LAC 33 III.2151 – Limiting Volatile Organic Compound (VOC) Emissions from Clean up Solvent Processing.	DOES NOT APPLY. The facility is in Assumption Parish. [LAC 33 III.2151.A]
	LAC 33:III.1103 – Impairment of Visibility on Public Roads Prohibited	Smoke emissions may not create a traffic hazard by impairment of visibility or intensify and existing traffic condition.
EQT 009 – EQT 016 Ovens O1 – O5, O6, O8, and Thermal Oxidizer RTO	LAC 33:III.1311.C – Particle Emission Limits	Shall be controlled so shade or appearance of emission is not denser than 20% opacity for more than one 6-minute period in any 60 consecutive minutes (LAC 33:III.1311.C).
	LAC 33 III.1502 –Applicability	DOES NOT APPLY. Emits less than 5 tons/yr. [LAC 33 III.1502.A.3]
	LAC 33 III. Chapter 22 – Control of Emissions of Nitrogen Oxides (NO _X)	DOES NOT APPLY. The facility is not in the Baton Rouge Nonattainment Area and in the Region of Influence.[2201.A]
EQT 019 – T-4 -Gasoline Tank	LAC 33 III.2131.A – Filling of Gasoline Storage Vessels	EXEMPT. Tank throughput is less than 500,000 gallons per year. [LAC 33.III.2131.D3]
EQT 017 – EQT 019 – T2, T3, and T4 Solvent TK- Wash Tank, Naphtha/Mineral Spirits Tank, and Gasoline Tank	LAC 33:III.2103 - Storage of Volatile Organic Compounds	Tanks having a capacity greater than 250 gallons and less than 40,000 gallons storing a volatile organic compound having a true vapor pressure of 1.5 psia or greater shall be equipped with a submerged fill pipe, a vapor loss control system or be a pressure tank.
	NSPS Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984. [40 CFR 60.110b]	DOES NOT APPLY. Tank capacity is less than 19,800 gallons. [40 CFR 60.110b(a)]

Prevention of Significant Deterioration/Nonattainment Review

Not applicable.

Streamlined Equipment Leak Monitoring Program

Not applicable.

MACT Requirements

Not applicable.

Air Quality Analysis

Emissions associated with the proposed modification were reviewed by the Air Quality Assessment Division to ensure compliance with the NAAQS and AAS. LDEQ did not require the applicant to model emissions for this renewal and modifications.

General Condition XVII Activities

The facility will comply with the applicable General Condition XVII Activities emissions as required by the operating permit rule. However, General Condition XVII Activities are not subject to testing, monitoring, reporting or recordkeeping requirements. For a list of approved General Condition XVII Activities, refer to the Section VIII – General Condition XVII Activities of the proposed permit.

Insignificant Activities

All Insignificant Activities are authorized under LAC 33:III.501.B.5. For a list of approved Insignificant Activities, refer to the Section IX – Insignificant Activities of the proposed permit.

V. PERMIT SHIELD

There is no permit shield in this permit.

VI. PERIODIC MONITORING

- Monitoring of actual paint and solvent usage to be used in calculating the associated volatile organic and toxic emissions.
- Baghouses (including gaskets): Equipment/operational data monitored by technically sound method upon each occurrence of process unit shut down or whenever visible emission checks indicate maintenance may be necessary. Change elements as necessary.

- Filter vents: Visible emissions monitored by visual inspection/determination daily. If visible emissions are observed, restore operation of the filter to its normal or usual manner of operation as expeditiously as practicable, but at a minimum within three working days, in accordance with good air pollution control practices for minimizing emissions.
- Thermal Oxidizer (RTO): Monitor the gas exhaust temperature of the (direct-flame) incinerator. If this temperature dips below 1350 °F, restore the RTO to normal operation as expeditiously as practicable, but at a minimum within three working days, in accordance with good air pollution control practices for minimizing emissions.

VII. GLOSSARY

Carbon Monoxide (CO) – A colorless, odorless gas, which is an oxide of carbon.

Maximum Achievable Control Technology (MACT) – The maximum degree of reduction in emissions of each air pollutant subject to LAC 33:III.Chapter 51 (including a prohibition on such emissions, where achievable) that the administrative authority, upon review of submitted MACT compliance plans and other relevant information and taking into consideration the cost of achieving such emission reduction, as well as any non-air-quality health and environmental impacts and energy requirements, determines is achievable through application of measures, processes, methods, systems, or techniques.

Hydrogen Sulfide (H₂S) – A colorless inflammable gas having the characteristic odor of rotten eggs, and found in many mineral springs. It is produced by the reaction of acids on metallic sulfides, and is an important chemical reagent.

New Source Review (NSR) – A preconstruction review and permitting program applicable to new or modified major stationary sources of air pollutants regulated under the Clean Air Act (CAA). NSR is required by Parts C ("Prevention of Significant Deterioration of Air Quality") and D ("Nonattainment New Source Review").

Nitrogen Oxides (NO_X) – Compounds whose molecules consist of nitrogen and oxygen.

Organic Compound – Any compound of carbon and another element. Examples: Methane (CH_4) , Ethane (C_2H_6) , Carbon Disulfide (CS_2)

Part 70 Operating Permit – Also referred to as a Title V permit, required for major sources as defined in 40 CFR 70 and LAC 33:III.507. Major sources include, but are not limited to, sources which have the potential to emit: ≥ 10 tons per year of any toxic air pollutant; ≥ 25 tons of total toxic air pollutants; and ≥ 100 tons per year of regulated pollutants (unless regulated solely under 112(r) of the Clean Air Act) (25 tons per year for sources in non-attainment parishes).

 PM_{10} – Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the method in Title 40, Code of Federal Regulations, Part 50, Appendix J.

Potential to Emit (PTE) – The maximum capacity of a stationary source to emit any air pollutant under its physical and operational design.

Prevention of Significant Deterioration (PSD) – A New Source Review permitting program for major sources in geographic areas that meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. PSD requirements are designed to ensure that the air quality in attainment areas will not degrade.

Sulfur Dioxide (SO₂) – An oxide of sulfur.

Sulfuric Acid (H_2SO_4) – A highly corrosive, dense oily liquid. It is a regulated toxic air pollutant under LAC 33:III.Chapter 51.

Title V Permit – See Part 70 Operating Permit.

Volatile Organic Compound (VOC) – Any organic compound, which participates in atmospheric photochemical reactions; that is, any organic compound other than those, which the administrator of the U.S. Environmental Protection Agency designates as having negligible photochemical reactivity.